STANDARD FOUNDATION NOTES ON PLANS 3-5-10

DRILLED PIERS

L 001 FOR DRILLED PIERS, SEE SPECIAL PROVISIONS.
H 001 *** REVISED GEOTECH 9/08 ***

L 002 DRILLED PIERS AT BENT NO. ___ ARE DESIGNED FOR A FACTORED RESISTANCE OF ____ KN PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF ____ KPA.
H 002 *** (LRFD) GEOTECH 9/08 ***

L 003 DRILLED PIERS AT BENT NO. ___ ARE DESIGNED FOR SKIN FRICTION ONLY. NO END BEARING CAPACITY IS REQUIRED.
H 003 *** (LFD/ASD) REVISED GEOTECH 6/05 ***

L 004 DRILLED PIERS AT BENT NO. ___ ARE DESIGNED FOR END BEARING ONLY. CHECK FIELD CONDITIONS FOR THE REQUIRED END BEARING CAPACITY OF ____ KPA.
H 004 *** (LFD/ASD) REVISED GEOTECH 6/05 ***

L 005 DRILLED PIERS AT BENT NO. ___ ARE DESIGNED FOR BOTH SKIN FRICTION AND END BEARING. CHECK FIELD CONDITIONS FOR THE REQUIRED END BEARING CAPACITY OF ____ KPA.
H 005 *** (LFD/ASD) REVISED GEOTECH 6/05 ***

L 006 DRILLED PIERS AT BENT NO. ___ ARE DESIGNED FOR AN APPLIED LOAD OF ____ KN EACH AT THE TOP OF THE COLUMN.
H 006 *** (LFD/ASD) REVISED GEOTECH 6/05 ***

L 007 PERMANENT STEEL CASINGS MAY BE REQUIRED FOR DRILLED PIERS AT BENT NO. ___. IF REQUIRED, DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION _____ M WITHOUT PRIOR APPROVAL FROM THE ENGINEER. THE ENGINEER WILL DETERMINE THE NEED FOR PERMANENT CASINGS.
H 007 *** REVISED GEOTECH 3/10 ***

L 008 PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT NO. ___. DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION _____ M WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
H 008 *** REVISED GEOTECH 3/10 ***

L 009 INSTALL PERMANENT STEEL CASINGS AT BENT NO. ___ BY VIBRATING, SCREWING OR DRIVING PERMANENT CASINGS BEFORE EXCAVATING OR DISTURBING ANY MATERIAL BELOW ELEVATION _____ M.
H 009 *** REVISED GEOTECH 3/10 ***

L 010 DO NOT USE MULTIPLE TEMPORARY STEEL CASINGS IN A TELESCOPED ARRANGEMENT TO STABILIZE DRILLED PIER EXCAVATIONS AT BENT NO. ___.
H 010 *** REVISED GEOTECH 3/10 ***

L 011 INSTALL DRILLED PIERS AT BENT NO. ___ THAT EXTEND TO AN ELEVATION NO HIGHER THAN _____ M AND SATISFY THE REQUIRED TIP RESISTANCE.
H 011 *** (LRFD) GEOTECH 9/08 ***

L 012 INSTALL DRILLED PIERS AT BENT NO. ___ THAT EXTEND TO AN ELEVATION NO HIGHER THAN _____ M, SATISFY THE REQUIRED TIP RESISTANCE AND HAVE A MINIMUM PENETRATION OF _____ M INTO ROCK AS DEFINED BY THE DRILLED PIERS PROVISION.
H 012 *** (LRFD) GEOTECH 9/08 ***

L 013 INSTALL DRILLED PIERS AT BENT NO. ___ THAT EXTEND TO AN ELEVATION NO HIGHER THAN _____ M AND SATISFY THE REQUIRED END BEARING CAPACITY.

H 013 *** (LFD/ASD) REVISED GEOTECH 11/07 ***

L 014 INSTALL DRILLED PIERS AT BENT NO. ___ THAT EXTEND TO AN ELEVATION NO HIGHER THAN _____ M, SATISFY THE REQUIRED END BEARING CAPACITY AND HAVE A MINIMUM PENETRATION OF _____ M INTO ROCK AS DEFINED BY THE DRILLED PIERS PROVISION.
H 014 *** (LFD/ASD) REVISED GEOTECH 9/08 ***

L 015 THE SCOUR CRITICAL ELEVATION FOR BENT NO. ___ IS ELEVATION _____ M. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.
H 015 *** REVISED GEOTECH 7/06 ***

L 016 SPT TESTING IS REQUIRED FOR DRILLED PIERS AT BENT NO. ___.
H 016 *** REVISED GEOTECH 11/07 ***

L 017 SPT TESTING MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR SPT TESTING.
H 017 *** REVISED GEOTECH 11/07 ***

L 018 DO NOT DEWATER DRILLED PIER EXCAVATIONS AT BENT NO. ___. CLEAN THE BOTTOM OF EXCAVATIONS WITH A SUBMERSIBLE PUMP OR AN AIRLIFT. WET PLACEMENT OF CONCRETE IS REQUIRED.
H 018 *** REVISED GEOTECH 11/07 ***

L 019 DO NOT USE SLURRY CONSTRUCTION FOR DRILLED PIERS AT BENT NO. ___.
H 019 *** REVISED GEOTECH 7/06 ***

L 020 SLURRY CONSTRUCTION IS REQUIRED FOR DRILLED PIERS AT BENT NO. ___.
H 020 *** REVISED GEOTECH 11/07 ***

L 021 DO NOT USE POLYMER SLURRY FOR DRILLED PIERS AT BENT NO. ___.
H 021 *** REVISED GEOTECH 7/06 ***

L 022 POLYMER SLURRY IS REQUIRED FOR DRILLED PIERS AT BENT NO. ___.
H 022 *** REVISED GEOTECH 11/07 ***

L 023 SID INSPECTIONS ARE REQUIRED FOR DRILLED PIERS AT BENT NO. ___.
H 023 *** REVISED GEOTECH 11/07 ***

L 024 SID INSPECTIONS MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR SID INSPECTIONS.
H 024 *** GEOTECH 11/07 ***

L 025 CSL TUBES AND TESTING ARE REQUIRED FOR DRILLED PIERS AT BENT NO. ___. FOR CROSSHOLE SONIC LOGGING, SEE SPECIAL PROVISIONS.
H 025 *** REVISED GEOTECH 9/08 ***

L 026 CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR CSL TESTING. FOR CROSSHOLE SONIC LOGGING, SEE SPECIAL PROVISIONS.
H 026 *** REVISED GEOTECH 9/08 ***

L 027 INTEGRITY TESTING MAY BE REQUIRED FOR DRILLED PIERS. IF REQUIRED AND AFTER DRILLED PIER CONCRETE ACHIEVES 3000 PSI COMPRESSIVE STRENGTH, PROVIDE ACCESS TO AND PREPARE TOP OF PIERS AS DIRECTED BY THE ENGINEER. THE ENGINEER WILL DETERMINE THE NEED FOR AND PERFORM INTEGRITY TESTING. DO NOT CONSTRUCT COLUMNS OR FOOTINGS ON TOP OF PIERS THAT ARE TESTED UNTIL TEST RESULTS ARE ACCEPTABLE. PAYMENT FOR COSTS ASSOCIATED WITH INTEGRITY TESTING WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNIT PRICE FOR THE DRILLED PIERS.
H 027 *** REVISED GEOTECH 3/10 ***

L 028 DRILLED PIER EXCAVATIONS AT BENT NO. ___ WILL EXTEND INTO MATERIAL THAT DETERIORATES WHEN EXPOSED TO THE ELEMENTS. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE AND PLACE CONCRETE IMMEDIATELY AFTER THE EXCAVATION IS COMPLETED.
H 028 *** (LRFD) GEOTECH 9/08 ***

L 029 DRILLED PIER EXCAVATIONS AT BENT NO. ___ WILL EXTEND INTO MATERIAL THAT DETERIORATES WHEN EXPOSED TO THE ELEMENTS. CHECK FIELD CONDITIONS FOR THE REQUIRED END BEARING CAPACITY AND PLACE CONCRETE IMMEDIATELY AFTER THE EXCAVATION IS COMPLETED.
H 029 *** (LFD/ASD) REVISED GEOTECH 7/06 ***

END BENT WAITING PERIODS

L 030 OBSERVE A ___ MONTH WAITING PERIOD AFTER CONSTRUCTING THE EMBANKMENT TO WITHIN 0.6 M OF FINISHED GRADE BEFORE BEGINNING END BENT CONSTRUCTION AT END BENT NO.___.
H 030 *** REVISED GEOTECH 11/07 ***

L 031 OBSERVE A ___ MONTH WAITING PERIOD AFTER CONSTRUCTING THE EMBANKMENT, END BENT AND REINFORCED BRIDGE APPROACH FILL, IF APPLICABLE, BEFORE BEGINNING APPROACH SLAB CONSTRUCTION AT END BENT NO. ___.
H 031 *** REVISED GEOTECH 11/07 ***

L 032 OBSERVE A ___ MONTH WAITING PERIOD AFTER CONSTRUCTING THE EMBANKMENT TO THE BOTTOM OF CAP ELEVATION BEFORE BEGINNING END BENT CONSTRUCTION AT END BENT NO. ___.
H 032 *** REVISED GEOTECH 11/07 ***

PILES

L 033 FOR PILES, SEE SPECIAL PROVISIONS.
H 033 *** (LRFD) GEOTECH 9/08 ***

L 034 AT THE CONTRACTOR'S OPTION, SUBSTITUTE STEEL PILES IN LIEU OF PRESTRESSED CONCRETE PILES AT BENT NO. ___ WITH THE FOLLOWING CONDITIONS:
H 034

L 035 1) SUBMIT STEEL PILE TYPE AND SIZE TO THE ENGINEER FOR APPROVAL.
H 035

L 036 2) SUBSTITUTE GALVANIZED STEEL PILES IN ACCORDANCE WITH THE PILES PROVISION FOR INTERIOR BENT PRESTRESSED CONCRETE PILES WITHOUT CALCIUM NITRITE CORROSION INHIBITOR.
H 036

L 037 3) SUBSTITUTE METALLIZED STEEL PILES WITH AN 8 MIL THICK 1350 ALUMINUM (W-AL-1350) THERMAL SPRAYED COATING AND A 0.5 MIL THICK SEAL COAT IN ACCORDANCE WITH THE THERMAL SPRAYED COATINGS (METALLIZATION) PROVISION FOR ALL PRESTRESSED CONCRETE PILES WITH CALCIUM NITRITE CORROSION INHIBITOR.
H 037

L 038 4) REGARDLESS OF THE TYPE, SIZE OR QUANTITY OF STEEL PILES SUBSTITUTED, PAYMENT FOR STEEL PILES WILL BE MADE FOR THE PLAN QUANTITY OF PRESTRESSED CONCRETE PILES AT THE CONTRACT UNIT PRICE FOR THE PRESTRESSED CONCRETE PILES. NO ADDITIONAL PAYMENT WILL BE MADE FOR STEEL PILE QUANTITIES IN EXCESS OF THE PLAN QUANTITY OF PRESTRESSED CONCRETE PILES REPLACED.
H 038

L 039 5) NO ADDITIONAL PAYMENT WILL BE MADE FOR CORROSION PROTECTION (GALVANIZING OR METALLIZING), STEEL PILE POINTS OR PIPE PILE PLATES. THESE ITEMS WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNIT PRICE OF THE PRESTRESSED CONCRETE PILES.
H 039 *** (LRFD) REVISED GEOTECH 3/10 ***

L 040 AT THE CONTRACTOR'S OPTION, SUBSTITUTE STEEL PILES IN LIEU OF PRESTRESSED CONCRETE PILES AT BENT NO. ___ WITH THE FOLLOWING CONDITIONS:
H 040

L 041 1) SUBMIT STEEL PILE TYPE AND SIZE TO THE ENGINEER FOR APPROVAL.
H 041

L 042 2) SUBSTITUTE GALVANIZED STEEL PILES IN ACCORDANCE WITH SECTION 450 OF THE STANDARD SPECIFICATIONS FOR INTERIOR BENT PRESTRESSED CONCRETE PILES WITHOUT CALCIUM NITRITE CORROSION INHIBITOR.
H 042

L 043 3) SUBSTITUTE METALLIZED STEEL PILES WITH AN 8 MIL THICK 1350 ALUMINUM (W-AL-1350) THERMAL SPRAYED COATING AND A 0.5 MIL THICK SEAL COAT IN ACCORDANCE WITH THE THERMAL SPRAYED COATINGS (METALLIZATION) PROVISION FOR ALL PRESTRESSED CONCRETE PILES WITH CALCIUM NITRITE CORROSION INHIBITOR.
H 043

L 044 4) REGARDLESS OF THE TYPE, SIZE OR QUANTITY OF STEEL PILES SUBSTITUTED, PAYMENT FOR STEEL PILES WILL BE MADE FOR THE PLAN QUANTITY OF PRESTRESSED CONCRETE PILES AT THE CONTRACT UNIT PRICE FOR THE PRESTRESSED CONCRETE PILES. NO ADDITIONAL PAYMENT WILL BE MADE FOR STEEL PILE QUANTITIES IN EXCESS OF THE PLAN QUANTITY OF PRESTRESSED CONCRETE PILES REPLACED.
H 044

L 045 5) NO ADDITIONAL PAYMENT WILL BE MADE FOR CORROSION PROTECTION (GALVANIZING OR METALLIZING), STEEL PILE POINTS OR PIPE PILE PLATES. THESE ITEMS WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNIT PRICE OF THE PRESTRESSED CONCRETE PILES.
H 045 *** (LFD/ASD) REVISED GEOTECH 3/10 ***

L 046 AT THE CONTRACTOR'S OPTION, SUBSTITUTE HP 12 X 53 STEEL PILES IN LIEU OF HP 10 X 42 STEEL PILES AT BENT NO. ___ AT NO ADDITIONAL COST TO THE DEPARTMENT.
H 046 *** REVISED GEOTECH 6/05 ***

L 047 PILES AT BENT NO. ___ ARE DESIGNED FOR A FACTORED RESISTANCE OF ____ KN PER PILE.
H 047 *** (LRFD) REVISED GEOTECH 3/10 ***

L 048 DRIVE PILES AT BENT NO. ___ TO A REQUIRED DRIVING RESISTANCE OF ____ KN PER PILE.
H 048 *** (LRFD) GEOTECH 3/10 ***

L 049 DRIVE PILES AT BENT NO. ___ TO A REQUIRED DRIVING RESISTANCE OF ____ KN PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR DOWNDRAG OR SCOUR.
H 049 *** (LRFD) REVISED GEOTECH 3/10 ***

L 050 DRIVE PILES AT BENT NO. ___ TO A REQUIRED BEARING CAPACITY OF ____ KN PER PILE. THE REQUIRED BEARING CAPACITY IS EQUAL TO THE ALLOWABLE BEARING CAPACITY WITH A MINIMUM FACTOR OF SAFETY OF TWO.
H 050 *** (LFD/ASD) REVISED GEOTECH 7/06 ***

L 051 DRIVE PILES AT BENT NO. ___ TO A REQUIRED BEARING CAPACITY OF ____ KN PER PILE. THE REQUIRED BEARING CAPACITY IS EQUAL TO THE ALLOWABLE BEARING CAPACITY WITH A MINIMUM FACTOR OF SAFETY OF TWO PLUS ANY ADDITIONAL CAPACITY TO ACCOUNT FOR DOWNDRAG OR NEGATIVE SKIN FRICTION AND SCOUR.
H 051 *** (LFD/ASD) REVISED GEOTECH 11/07 ***

L 052 INSTALL PILES AT BENT NO. ___ TO A TIP ELEVATION NO HIGHER THAN _____ M.
H 052 *** REVISED GEOTECH 11/07 ***

L 053 INSTALL PRESTRESSED CONCRETE AND STEEL H PILE SECTIONS OF COMPOSITE PILES AT BENT NO. ___ TO TIP ELEVATIONS NO HIGHER THAN _____ M AND _____ M, RESPECTIVELY.
H 053 *** (LRFD) GEOTECH 3/10 ***

L 054 STEEL PILE POINTS (WITH TEETH) ARE REQUIRED FOR STEEL PILES AT BENT NO. ___.
H 054 *** (LFD/ASD) REVISED GEOTECH 11/07 ***

L 055 STEEL PILE TIPS ARE REQUIRED FOR PRESTRESSED CONCRETE PILES AT BENT NO. ___.
H 055 *** (LFD/ASD) REVISED GEOTECH 11/07 ***

L 056 STEEL H PILE POINTS ARE REQUIRED FOR STEEL H PILES AT BENT NO. ___. FOR STEEL PILE POINTS, SEE PILES PROVISION.
H 056 *** (LRFD) REVISED GEOTECH 3/10 ***

L 057 STEEL PIPE PILE (CUTTING SHOES or CONICAL POINTS) ARE REQUIRED FOR STEEL PIPE PILES AT BENT NO. ___. FOR STEEL PILE POINTS, SEE PILES PROVISION.
H 057 *** (LRFD) REVISED GEOTECH 3/10 ***

L 058 STEEL PILE TIPS ARE REQUIRED FOR PRESTRESSED CONCRETE PILES AT BENT NO. ___. FOR STEEL PILE TIPS, SEE PILES PROVISION.
H 058 *** (LRFD) REVISED GEOTECH 3/10 ***

L 059 THE SCOUR CRITICAL ELEVATION FOR BENT NO. ___ IS ELEVATION _____ M. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.
H 059 *** REVISED GEOTECH 7/06 ***

L 060 THE ALLOWABLE BEARING CAPACITY FOR PILES AT BENT NO. ___ IS ____ KN PER PILE.
H 060 *** (LFD/ASD) GEOTECH 7/06 ***

L 061 IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF ____ J PER BLOW WILL BE REQUIRED TO DRIVE PILES AT BENT NO. ___. THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM PROVIDING DRIVING EQUIPMENT IN ACCORDANCE WITH THE PILES PROVISION.
H 061 *** (LRFD) GEOTECH 9/08 ***

L 062 IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF ____ J PER BLOW WILL BE REQUIRED TO DRIVE PILES AT BENT NO. ___. THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM ARTICLE 450-5 OF THE STANDARD SPECIFICATIONS.
H 062 *** (LFD/ASD) REVISED GEOTECH 7/06 ***

L 063 DO NOT BEGIN WORK AT BENT NO. ___ UNTIL FILL HAS BEEN PLACED.
H 063 *** REVISED GEOTECH 6/05 ***

L 064 THE CONTRACTOR MAY CHOOSE TO CONSTRUCT BENT NO. ___ BEFORE PLACING FILL. PLACE FILL IN ACCORDANCE WITH ARTICLE 410-8 OF THE STANDARD SPECIFICATIONS.
H 064 *** REVISED GEOTECH 11/07 ***

L 065 THE QUANTITY SHOWN FOR FOUNDATION EXCAVATION IS BASED ON PLACING FILL BEFORE CONSTRUCTING BENT NO. ___. IF THE CONTRACTOR CHOOSES TO CONSTRUCT THE BENT(S) BEFORE PLACING FILL, THE QUANTITY FOR FOUNDATION EXCAVATION WILL BE MEASURED FROM THE GROUND LINE AT THE TIME OF BENT CONSTRUCTION.
H 065 *** REVISED GEOTECH 11/07 ***

L 066 TESTING PILES WITH THE PILE DRIVING ANALYZER (PDA) DURING DRIVING, RESTRIKING OR REDRIVING MAY BE REQUIRED. THE ENGINEER WILL DETERMINE THE NEED FOR PDA TESTING. FOR PILE DRIVING ANALYZER, SEE PILES PROVISION.
H 066 *** (LRFD) REVISED GEOTECH 3/10 ***

L 067 TESTING THE (FIRST) (PRODUCTION or TEST) PILE(S) WITH THE PILE DRIVING ANALYZER DURING DRIVING, RESTRIKING OR REDRIVING IS REQUIRED AT BENT NO. ___. FOR PILE DRIVING ANALYZER, SEE PILES PROVISION.
H 067 *** (LRFD) REVISED GEOTECH 3/10 ***

L 068 TESTING PILES WITH THE PILE DRIVING ANALYZER (PDA) DURING DRIVING, RESTRIKING OR REDRIVING MAY BE REQUIRED. THE ENGINEER WILL DETERMINE THE NEED FOR PDA TESTING. FOR PILE DRIVING ANALYZER, SEE SPECIAL PROVISIONS.
H 068 *** (LFD/ASD) REVISED GEOTECH 9/08 ***

L 069 TESTING THE (FIRST) (PRODUCTION or TEST) PILE(S) WITH THE PILE DRIVING ANALYZER DURING DRIVING, RESTRIKING OR REDRIVING IS REQUIRED AT BENT NO. ___. FOR PILE DRIVING ANALYZER, SEE SPECIAL PROVISIONS.
H 069 *** (LFD/ASD) REVISED GEOTECH 9/08 ***

L 070 GALVANIZED STEEL PILES ARE REQUIRED AT BENT NO. ___ IN ACCORDANCE WITH THE PILES PROVISION.
H 070 *** (LRFD) REVISED GEOTECH 9/09 ***

L 071 GALVANIZED STEEL PILES ARE REQUIRED AT BENT NO. ___ IN ACCORDANCE WITH SECTION 450 OF THE STANDARD SPECIFICATIONS.
H 071 *** (LFD/ASD) REVISED GEOTECH 9/09 ***

L 072 PILE EXCAVATION IS REQUIRED TO INSTALL PILES AT BENT NO. ___. EXCAVATE HOLES AT PILE LOCATIONS TO ELEVATION _____ M. FOR PILE EXCAVATION, SEE PILES PROVISION.
H 072 *** (LRFD) REVISED GEOTECH 3/10 ***

L 073 CONCRETE IS REQUIRED TO FILL HOLES FOR PILE EXCAVATION AT BENT NO. ___.
H 073 *** (LRFD) GEOTECH 9/08 ***

L 074 PILE EXCAVATION IS REQUIRED TO INSTALL PILES AT BENT NO. ___. EXCAVATE HOLES TO ELEVATION _____ M. FOR PILE EXCAVATION, SEE SPECIAL PROVISIONS.
H 074 *** (LFD/ASD) REVISED GEOTECH 9/08 ***

L 075 PIPE PILE PLATES ARE REQUIRED FOR STEEL PIPE PILES AT BENT NO. ___. USE PIPE PILE PLATES WITH A DIAMETER EQUAL TO THE PIPE PILE DIAMETER. FOR STEEL PIPE PILE PLATES, SEE PILES PROVISION.
H 075 *** (LRFD) GEOTECH 3/10 ***

L 076 PIPE PILE PLATES MAY BE REQUIRED FOR STEEL PIPE PILES AT BENT NO. ___. THE ENGINEER WILL DETERMINE THE NEED FOR PIPE PILES PLATES AFTER DRIVING TEST PILES OR A FEW INITIAL PRODUCTION PILES. USE PIPE PILE PLATES WITH A DIAMETER EQUAL TO THE PIPE PILE DIAMETER. FOR STEEL PIPE PILE PLATES, SEE PILES PROVISON.
H 076 *** (LRFD) GEOTECH 3/10 ***

L 077 PIPE PILE PLATES ARE NOT REQUIRED FOR STEEL PIPE PILES AT BENT NO. ___.
H 077 *** REVISED GEOTECH 3/10 ***

L 078 PIPE PILE PLATES ARE REQUIRED FOR PIPE PILES AT BENT NO. ___. USE PIPE PILE PLATES WITH A DIAMETER EQUAL TO THE PIPE PILE DIAMETER.
H 078 *** (LFD/ASD) REVISED GEOTECH 11/07 ***

L 079 PIPE PILE PLATES MAY BE REQUIRED FOR PIPE PILES AT BENT NO. ___. THE ENGINEER WILL DETERMINE THE NEED FOR PIPE PILES PLATES AFTER DRIVING TEST PILES OR A FEW INITIAL PRODUCTION PILES. USE PIPE PILE PLATES WITH A DIAMETER EQUAL TO THE PIPE PILE DIAMETER.
H 079 *** (LFD/ASD) REVISED GEOTECH 11/07 ***

L 080 PREDRILLING FOR PILES IS REQUIRED AT BENT NO. ___. PREDRILL PILE LOCATIONS TO ELEVATION _____ M WITH EQUIPMENT THAT WILL RESULT IN A MAXIMUM PREDRILLING DIAMETER OF ___MM. FOR PREDRILLING FOR PILES, SEE PILES PROVISION.
H 080 *** (LRFD) GEOTECH 3/10 ***

L 081 IF NECESSARY, PREDRILL PILE LOCATIONS AT BENT NO. ___ TO ELEVATION _____ M WITH EQUIPMENT THAT WILL RESULT IN A MAXIMUM PREDRILLING DIAMETER OF ___MM. FOR PREDRILLING FOR PILES, SEE PILES PROVISION.
H 081 *** (LRFD) GEOTECH 3/10 ***

L 082 SPUDDING MAY BE USED IN LIEU OF PREDRILLING AT BENT NO. ___.
H 082 *** (LRFD) GEOTECH 3/10 ***

L 083 TEMPORARY STEEL CASINGS ARE REQUIRED FOR PREDRILLING (AND SPUDDING) AT BENT NO. ___.
H 083 *** (LRFD) GEOTECH 3/10 ***

FOOTING ON PILES

L 084 THE SCOUR CRITICAL ELEVATION FOR BENT NO. ___ IS ELEVATION _____ M. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.
H 084 *** REVISED GEOTECH 7/06 ***

L 085 PIER SCOUR PROTECTION IS REQUIRED FOR FOOTINGS AT BENT NO. ___. DO NOT PLACE RIP RAP ABOVE THE STREAM BED.
H 085 *** REVISED GEOTECH 7/06 ***

SPREAD FOOTINGS

L 086 THE SCOUR CRITICAL ELEVATION FOR BENT NO. ___ IS THE BOTTOM OF FOOTING ELEVATION. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.
H 086 *** REVISED GEOTECH 7/06 ***

L 087 THE SPREAD FOOTINGS AT BENT NO. ___ ARE DESIGNED FOR A FACTORED RESISTANCE OF ____ KPA. CHECK FIELD CONDITIONS FOR THE REQUIRED RESISTANCE OF ____ KPA JUST BEFORE PLACING CONCRETE.
H 087 *** (LRFD) GEOTECH 9/08 ***

L 088 THE REQUIRED BEARING CAPACITY FOR SPREAD FOOTINGS AT BENT NO. ___ IS ____ KPA. CHECK FIELD CONDITIONS FOR THE REQUIRED BEARING CAPACITY JUST BEFORE PLACING CONCRETE.
H 088 *** (LFD/ASD) REVISED GEOTECH 11/07 ***

L 089 THE ALLOWABLE BEARING CAPACITY FOR SPREAD FOOTINGS AT BENT NO. ___ IS ____ KPA.
H 089 *** (LFD/ASD) GEOTECH 7/06 ***

L 090 TO PROVIDE PROTECTION FROM POSSIBLE SCOUR, DO NOT CONSTRUCT SPREAD FOOTINGS AT BENT NO. ___ AT AN ELEVATION HIGHER THAN SHOWN ON THE PLANS.
H 090 *** REVISED GEOTECH 7/06 ***

L 091 (KEY or CARRY IN) SPREAD FOOTINGS AT BENT NO. ___ AT LEAST 300 MM INTO ROCK WITH MINIMUM THICKNESS AS SHOWN ON THE PLANS.
H 091 *** REVISED GEOTECH 11/07 ***

L 092 PIER SCOUR PROTECTION IS REQUIRED FOR SPREAD FOOTINGS AT BENT NO. ___. DO NOT PLACE RIP RAP ABOVE THE STREAM BED.
H 092 *** REVISED GEOTECH 7/06 ***

L 093 FOR BLASTING ADJACENT TO HIGHWAY STRUCTURES, SEE ROCK BLASTING PROVISION, IF APPLICABLE, OR ARTICLE 410-11 OF THE STANDARD SPECIFICATIONS.
H 093 *** REVISED GEOTECH 9/08 ***

L 094 FOOTING EXCAVATIONS AT BENT NO. ___ WILL EXTEND INTO MATERIAL THAT DETERIORATES WHEN EXPOSED TO THE ELEMENTS. CHECK FIELD CONDITIONS FOR THE REQUIRED RESISTANCE AND PLACE CONCRETE IMMEDIATELY AFTER THE EXCAVATION IS COMPLETED.
H 094 *** (LRFD) GEOTECH 9/08 ***

L 095 FOOTING EXCAVATIONS AT BENT NO. ___ WILL EXTEND INTO MATERIAL THAT DETERIORATES WHEN EXPOSED TO THE ELEMENTS. CHECK FIELD CONDITIONS FOR THE REQUIRED BEARING CAPACITY AND PLACE CONCRETE IMMEDIATELY AFTER THE EXCAVATION IS COMPLETED.
H 095 *** (LFD/ASD) REVISED GEOTECH 7/06 ***

CULVERT FOOTINGS

L 096 CONSTRUCT THE REINFORCED CONCRETE BOX CULVERT AT STATION _____ WITH ____ MM OF CAMBER TO ACCOUNT FOR ANTICIPATED SETTLEMENT.
H 096 *** REVISED GEOTECH 11/07 ***

L 097 BACKFILL WITH SELECT MATERIAL, CLASS _____ MEETING THE REQUIREMENTS OF SECTION 1016 OF THE STANDARD SPECIFICATIONS. (Geotechnical Engineering Unit will determine select material class.)
H 097 *** REVISED GEOTECH 11/07 ***

L 098 (KEY or CARRY IN) FOOTINGS FOR THE REINFORCED BOX CULVERT AT STATION _____ AT LEAST 300 MM INTO ROCK WITH A MINIMUM THICKNESS AS SHOWN ON THE PLANS.
H 098 *** REVISED GEOTECH 11/07 ***